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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,645	03/14/2002	Aurelio J. Gutierrez	PENG.617A	2221
27299	7590	11/20/2003	EXAMINER	
GAZDZINSKI & ASSOCIATES 11440 WEST BERNARDO COURT, SUITE 375 SAN DIEGO, CA 92127			TSUKERMAN, LARISA Z	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/099,645

Applicant(s)

GUTIERREZ ET AL.

Examiner

Larisa Z Tsukerman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28, 43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 7-20, 23, 27, 28, 43 and 45 is/are rejected.
- 7) ☒ Claim(s) 2-4, 6-10, 21, 22 and 24-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5, 6. 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's election without traverse of Group I drawn to a connector assembly including claims 1-28, 43 and 45 in Paper No. 8 is acknowledged.

Applicant's election with traverse of Species 2 in Paper No. 8 is acknowledged. Examiner agrees to examine claims 1-28, 43 and 45 on the merits.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to what "means for housing" is referred to.

Regarding claim 43, the word "means" is preceded by the word(s) "substrate" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Scheer (5759067).

**In regard to claim 1**, discloses a connector assembly comprising:

a connector **housing 36** comprising a **connector 22** having:

**a recess 40** adapted to receive at least a portion of a modular plug (not shown, see Col. 3, lines 28 – 30 and 36-37), the modular plug having a plurality of terminals (not shown) disposed thereon;

**at least one substrate 10** (PCB) having at least one electrically conductive pathway associated therewith (inherent);

**a cavity 28** adapted to receive at least a portion of the at least one substrate;

**a plurality of first conductors 16** disposed at least partly within the recess 40a, the first conductors being configured to form an electrical contact with respective ones of the terminals when the modular plug is received within the recess (not shown, see Col. 3, lines 28 – 30 and 36-37), and form an electrical pathway between the first conductors and the at least one substrate; and

**a plurality of second conductors 18**, at least one of the second conductors being in electrical communication with the at least one electrically conductive pathway of the at least one substrate (PCB) 10.

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Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto et al. (5069641).

**In regard to claim 1**, Sakamoto et al. disclose a connector assembly comprising:

a connector **housing 12** comprising a **connector 14** having:

**a recess 18a** adapted to receive at least a portion of a modular plug 60 (not shown, see Col. , lines), the modular plug having a plurality of terminals (not shown) disposed thereon;

**at least one substrate 30** (PCB) having at least one electrically conductive pathway 33/34 and 24 associated therewith;

**a cavity 18b** adapted to receive at least a portion of the at least one substrate 30;

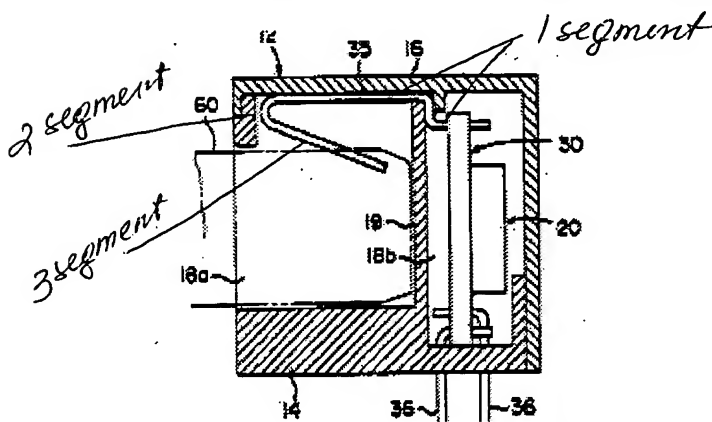
**a plurality of first conductors 35** disposed at least partly within the recess 18a, the first conductors 35 being configured to form an electrical contact with respective ones of the terminals when the modular plug 60 is received within the recess, and form an electrical pathway between the first conductors and the at least one substrate; and

**a plurality of second conductors 36**, at least one of the second conductors being in electrical communication with the at least one electrically conductive pathway 24 of the at least one substrate (PCB) 30.

**In regard to claim 5**, Sakamoto et al. disclose the first conductors 35 comprise at least three conductor segments (see Examiner's Attachment 1), the at least three segments comprising:

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- (i) at least a first segment oriented **substantially** normal to the at least one substrate 30;
- (ii) at least a second segment communicating with the at least first segment, the second segment having a substantially different angular orientation with respect to the at least one substrate 30 than the at least first segment; and
- (iii) at least a third segment communicating with the at least second segment, the third segment having a substantially different angular orientation with respect to the at least one substrate than the at least first or second segments.



## Attachment 1

Claims 1, 11-20 23, 27-28, 43 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu (6132260).

In regard to claims 1, 11, 43 and 45, Wu disclose a multi – port connector assembly (Abstract, line 1) comprising:

a connector **housing** 2 comprising a plurality of connectors C (see Examiner's Attachment 2) having:

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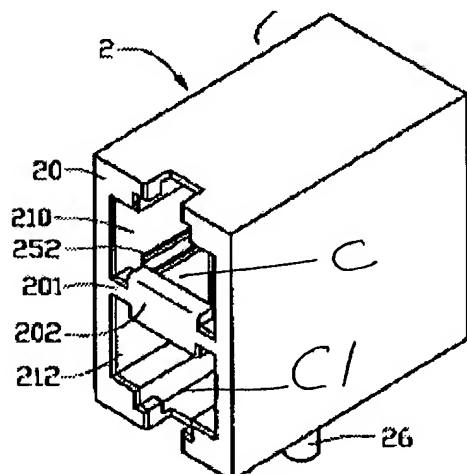
a **recess 210** adapted for receiving at least a portion of a modular plug (not shown, Col. Line ), the modular plug having a plurality of terminals disposed thereon (not shown);

at least one **substrate (PCB) 7** having at least one electrically conductive **pathway** associated therewith;

a **cavity 22** adapted for receiving at least a portion of the at least one substrate, the at least one substrate being disposed within the cavity in substantially **orthogonal orientation** (see Fig. 1) with respect to a front face of the housing;

a plurality of **first conductors 4** disposed at least partly within the recess, the first conductor being configured to form an electrical contact with respective ones of the terminals when the modular plug is received within the recess, and for forming an electrical pathway between the first conductor and the at least one substrate 7; and

a plurality of **second conductors 61**, at least one of the second conductors being in electrical communication with the at least one electrically conductive pathway of the at least one substrate.



Attachment 2

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**In regard to claim 12**, Wu discloses the first conductors 4 are formed so as to be substantially coplanar in that portion of the conductors which mates with the at least one substrate 7 (see Fig. 1).

**In regard to claim 13**, Wu discloses at least one conductor carrier 3 disposed proximate to at least a portion of the first conductors, the at least one carrier 3 adapted to at least retain the first conductors 4 in the substantially coplanar orientation.

**In regard to claim 14**, Wu discloses the at least one carrier 3 is further adapted to maintain at least one predetermined separation between individual ones of the first conductors 4 (see Fig. 2).

**In regard to claim 15**, Wu discloses the at least one carrier 3 is further adapted to maintain at least one predetermined separation between the first conductors 4 of a first of the connectors and corresponding first conductors 4 of a second of the connectors.

**In regard to claim 16**, Wu discloses at least one conductor carrier 3 disposed proximate to at least a portion of the first conductors 4, the at least one carrier adapted to maintain at least one predetermined separation between the first conductors of a first of the connectors and corresponding first conductors of a second of the connectors.

**In regard to claim 17**, Wu discloses at least one conductor carrier 3, the carrier being adapted to retain the first conductors 4 in a predetermined orientation.

**In regard to claim 18**, Wu discloses the housing 2 further comprises at least one aperture 252 formed therein, the at least one carrier 3 being adapted to be



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received at least partly within the at least one aperture 252 so as to retain the at least one carrier 3 in a substantially fixed position relative to the housing 2 when the connector assembly is assembled.

**In regard to claim 19**, the predetermined orientation comprises at least maintaining at least a portion of the first conductors 4 substantially coplanar and separated from one another (see Fig. 2).

**In regard to claim 20**, Wu discloses the at least one conductor carrier 3 comprises a substantially unitary body 30 having a plurality of **grooves G** formed therein, the grooves further adapted to frictionally receive at least a portion of respective ones of the first conductors 4 therein.

**In regard to claim 23**, Wu discloses at least two of the connectors C and C1 are disposed in a port pair (see Examiner's Attachment 2 and Abstract), the first conductors 4 of each connector in the port pair being substantially coplanar, the plane of the first conductors of a first connector in the port pair being substantially parallel with that of the first conductors of a second connector in the port pair.

**In regard to claim 27**, Wu discloses the first 4 and second 61 conductors mate with the at least one substrate 7 at the top and bottom portions thereof respectively.

**In regard to claim 28**, Wu discloses the comprising at least one electrical **component** disposed on the at least one substrate, wherein the at least one electrical component has an elevation below that of the first conductors.

***Allowable Subject Matter***

Claims 2 – 4, 6 – 10, 21- 22 and 24- 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The Prior Art does not show:

**Regarding claims 2 – 4 and 21 - 22**, each conductor includes an effectively curved portion and the effective radius of each the effectively curved portion being different for each of the first conductors; and the first conductors and the plurality of grooves each include an effectively curved portion, the effective radius of each being different.

**Regarding claims 6 – 10 and 24 – 26**, at least one substrate is disposed in substantially **vertical** orientation within, and substantially **orthogonal** to the front face of said housing;

in combination with all the other elements of the dependent and independent claims and the examiner knows of no permissible motivation to combine the prior art such that the subject matter as a whole would have been obvious at the time the invention was made.

If the application becomes allowable, any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

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Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Farrar et al. (4726638), Pirc (4799901), Sakamoto et al. (4789847), Raman (5587884), Tsai et al. (6227905), Givens et al. (6474999), Abernethy et al. (4274691), Tsao et al. (6080011), Townsend et al. (5736910), Bouchan et al. (5697817), Nitta et al. (6572409), Astbury, Jr. et al. (6602095), Sipe (6540522).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larisa Z Tsukerman whose telephone number is (703)-308-6038. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 703-308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703)-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

L.T.

November 17, 2003



**THO D. TA  
PRIMARY EXAMINER**